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RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/841,132

DATE: 05/10/2001
 TIME: 09:34:15

Input Set : A:\469c8.app.txt
 Output Set: N:\CRF3\05102001\I841132.raw

214
 Does Not Comply
 Corrected Diskette Needed

4 <110> APPLICANT: Bhatia, Ajay
 5 Skeiky, Yasir A.W.
 6 Probst, Peter
 8 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
 9 DIAGNOSIS OF CHLAMYDIAL INFECTION
 11 <130> FILE REFERENCE: 210121.469C8
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/841,132
 14 <141> CURRENT FILING DATE: 2001-04-23
 16 <160> NUMBER OF SEQ ID NOS: 599
 18 <170> SOFTWARE: FastSEQ for Windows Version 3.0/4.0
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 481
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Chlamydia trachomatis
 25 <400> SEQUENCE: 1
 26 ctgaagactt ggctatgttt tttattttga cgataaacct agttaaggca taaaagagtt 60
 27 gcgaaggaag agccctcaac ttttcttata accttcttta actaggagtc atccatgagt 120
 28 caaaataaga actctgcttt catgcagcct gtgaacgtat ccgctgattt agctgccatc 180
 29 gttggtgcag gacctatgcc tcgcacagag atcattaaga aaatgtggga ttacattaag 240
 30 gagaatagtc ttcaagatcc tacaacaaaa cgtaatatca atcccgatga taaattggct 300
 31 aaagtttttg gaactgaaaa acctatcgat atgttccaaa tgacaaaaat ggtttctcaa 360
 32 cacatcatta aataaaatag aaattgactc acgtgttctt cgtctttaag atgaggaact 420
 33 agttcattct ttttgttcgt ttttgtgggt attactgtat ctttaacaac tatottagca 480
 34 g 481
 36 <210> SEQ ID NO: 2
 37 <211> LENGTH: 183
 38 <212> TYPE: DNA
 39 <213> ORGANISM: Chlamydia trachomatis
 41 <400> SEQUENCE: 2
 42 atcggttggtg caggacctat gcctcgacac gagatcatta agaaaatgtg ggattacatt 60
 43 aaggagaata gtcttcaaga tcctacaaac aaacgtaata tcaatcccga tgataaattg 120
 44 gctaaagttt ttggaactga aaaacctatc gatatgttcc aaatgacaaa aatggtttct 180
 45 caa 183
 47 <210> SEQ ID NO: 3
 48 <211> LENGTH: 110
 49 <212> TYPE: DNA
 50 <213> ORGANISM: Chlamydia trachomatis
 52 <400> SEQUENCE: 3
 53 gctgcgacat catgcgagct tgcaaaccac catggacatc tccaatttcc ccttctaact 60
 54 cgctcttttg aactaatgct gctaccgagt caatcacaat cacatcgacc 110
 56 <210> SEQ ID NO: 4
 57 <211> LENGTH: 555
 58 <212> TYPE: DNA
 59 <213> ORGANISM: Chlamydia trachomatis
 61 <400> SEQUENCE: 4
 62 cggcagcagc ctaagatgct tatactactt taagggaggc ccttcgtatg ccgcgcacatca 60
 63 ttggaataga tattctctgcg aaaaagaaat taaaataaag ttttacatat atttatggaa 120

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64 tagggccagc tctttctaaa gagattattg ctagattgca gttgaatccc gaagctagag 180
65 ctgcagagtt gactgaggaa gaggttggtc gactaaacgc tcttttacag tcggattacg 240
66 ttgttgaagg ggattttcgc cgtcgtgtgc aatctgatat caaacgtctg attactatcc 300
67 atgcttatcg tggacaaaga catagacttt ctttgctgtg tcgtggtcag agaacaaaaa 360
68 caaattctcg cacgcgtaag ggtaaacgta aaactattgc aggtaagaag aaataataat 420
69 ttttaggaga gagtggtttg gttaaaaatc aagcgcaaaa aagaggcgta aaaagaaaac 480
70 aagtaaaaaa cattccttcg ggcgttgctc atgttaaggc tacttttaat aatacaattg 540
71 taaccataac agacc 555

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73 <210> SEQ ID NO: 5

74 <211> LENGTH: 86

75 <212> TYPE: PRT

76 <213> ORGANISM: Chlamydia trachomatis

78 <400> SEQUENCE: 5

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79 Met Ser Gln Asn Lys Asn Ser Ala Phe Met Gln Pro Val Asn Val Ser
80 1 5 10 15
81 Ala Asp Leu Ala Ala Ile Val Gly Ala Gly Pro Met Pro Arg Thr Glu
82 20 25 30
83 Ile Ile Lys Lys Met Trp Asp Tyr Ile Lys Glu Asn Ser Leu Gln Asp
84 35 40 45
85 Pro Thr Asn Lys Arg Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys Val
86 50 55 60
87 Phe Gly Thr Glu Lys Pro Ile Asp Met Phe Gln Met Thr Lys Met Val
88 65 70 75 80
89 Ser Gln His Ile Ile Lys
90 85

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92 <210> SEQ ID NO: 6

93 <211> LENGTH: 61

94 <212> TYPE: PRT

95 <213> ORGANISM: Chlamydia trachomatis

97 <400> SEQUENCE: 6

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98 Ile Val Gly Ala Gly Pro Met Pro Arg Thr Glu Ile Ile Lys Lys Met
99 1 5 10 15
100 Trp Asp Tyr Ile Lys Glu Asn Ser Leu Gln Asp Pro Thr Asn Lys Arg
101 20 25 30
102 Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys Val Phe Gly Thr Glu Lys
103 35 40 45
104 Pro Ile Asp Met Phe Gln Met Thr Lys Met Val Ser Gln
105 50 55 60

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107 <210> SEQ ID NO: 7

108 <211> LENGTH: 36

109 <212> TYPE: PRT

110 <213> ORGANISM: Chlamydia trachomatis

112 <400> SEQUENCE: 7

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113 Ala Ala Thr Ser Cys Glu Leu Ala Asn Gln His Gly His Leu Gln Phe
114 1 5 10 15
115 Pro Leu Leu Thr Arg Ser Leu Glu Leu Met Leu Leu Pro Ser Gln Ser
116 20 25 30
117 Gln Ser His Arg
118 35

```

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120 <210> SEQ ID NO: 8
121 <211> LENGTH: 18
122 <212> TYPE: PRT
123 <213> ORGANISM: Chlamydia trachomatis
125 <400> SEQUENCE: 8
126 Leu Arg His His Ala Ser Leu Gln Thr Asn Met Asp Ile Ser Asn Phe
127   1             5             10             15
128 Pro Phe
131 <210> SEQ ID NO: 9
132 <211> LENGTH: 5
133 <212> TYPE: PRT
134 <213> ORGANISM: Chlamydia trachomatis
136 <400> SEQUENCE: 9
137 Leu Ala Leu Trp Asn
138   1             5
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 11
142 <212> TYPE: PRT
143 <213> ORGANISM: Chlamydia trachomatis
145 <400> SEQUENCE: 10
146 Cys Cys Tyr Arg Val Asn His Asn His Ile Asp
147   1             5             10
149 <210> SEQ ID NO: 11
150 <211> LENGTH: 36
151 <212> TYPE: PRT
152 <213> ORGANISM: Chlamydia trachomatis
154 <400> SEQUENCE: 11
155 Val Asp Val Ile Val Ile Asp Ser Val Ala Ala Leu Val Pro Lys Ser
156   1             5             10             15
157 Glu Leu Glu Gly Glu Ile Gly Asp Val His Val Gly Leu Gln Ala Arg
158           20             25             30
159 Met Met Ser Gln
160           35
162 <210> SEQ ID NO: 12
163 <211> LENGTH: 122
164 <212> TYPE: PRT
165 <213> ORGANISM: Chlamydia trachomatis
167 <400> SEQUENCE: 12
168 Met Pro Arg Ile Ile Gly Ile Asp Ile Pro Ala Lys Lys Lys Leu Lys
169   1             5             10             15
170 Ile Ser Leu Thr Tyr Ile Tyr Gly Ile Gly Pro Ala Leu Ser Lys Glu
171           20             25             30
172 Ile Ile Ala Arg Leu Gln Leu Asn Pro Glu Ala Arg Ala Ala Glu Leu
173           35             40             45
174 Thr Glu Glu Glu Val Gly Arg Leu Asn Ala Leu Leu Gln Ser Asp Tyr
175           50             55             60
176 Val Val Glu Gly Asp Leu Arg Arg Arg Val Gln Ser Asp Ile Lys Arg
177   65             70             75             80
178 Leu Ile Thr Ile His Ala Tyr Arg Gly Gln Arg His Arg Leu Ser Leu

```

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179          85          90          95
180 Pro Val Arg Gly Gln Arg Thr Lys Thr Asn Ser Arg Thr Arg Lys Gly
181          100          105          110
182 Lys Arg Lys Thr Ile Ala Gly Lys Lys Lys
183          115          120
185 <210> SEQ ID NO: 13
186 <211> LENGTH: 20
187 <212> TYPE: PRT
188 <213> ORGANISM: Chlamydia trachomatis
190 <400> SEQUENCE: 13
191 Asp Pro Thr Asn Lys Arg Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys
192 1          5          10          15
193 Val Phe Gly Thr
194          20
196 <210> SEQ ID NO: 14
197 <211> LENGTH: 20
198 <212> TYPE: PRT
199 <213> ORGANISM: Chlamydia trachomatis
201 <400> SEQUENCE: 14
202 Asp Asp Lys Leu Ala Lys Val Phe Gly Thr Glu Lys Pro Ile Asp Met
203 1          5          10          15
204 Phe Gln Met Thr
205          20
207 <210> SEQ ID NO: 15
208 <211> LENGTH: 161
209 <212> TYPE: DNA
210 <213> ORGANISM: Chlamydia trachomatis
212 <400> SEQUENCE: 15
213 atctttgtgt gtctcataag cgcagagcgg ctgcggctgt ctgtagcttc atcggaggaa 60
214 ttacctacct cgcgacattc ggagctatcc gtccgattct gtttgtcaac aaaatgctgg 120
215 cgcaaccgtt tctttcttcc caaactaaag caaatatggg a 161
217 <210> SEQ ID NO: 16
218 <211> LENGTH: 897
219 <212> TYPE: DNA
220 <213> ORGANISM: Chlamydia trachomatis
222 <400> SEQUENCE: 16
223 atggcttcta tatgcggacg tttagggctc ggtacaggga atgctctaaa agcttttttt 60
224 acacagccca acaataaaat ggcaagggtg gtaaataaga cgaagggaat ggataagact 120
225 attaaggttg ccaagtctgc tgccgaattg accgcaaata ttttggaaca agctggaggc 180
226 gcgggctctt ccgcacacat tacagcttcc caagtgtcca aaggattagg ggatgcgaga 240
227 actgttgctg ctttagggaa tgcctttaac ggagcgttgc caggaacagt tcaaagtgcg 300
228 caaagcttct tctctcacat gaaagctgct agtcagaaaa cgcaagaagg ggatgagggg 360
229 ctcacagcag atctttgtgt gtctcataag cgcagagcgg ctgcggctgt ctgtagcatc 420
230 atcggaggaa ttacctacct cgcgacattc ggagctatcc gtccgattct gtttgtcaac 480
231 aaaatgctgg caaaaccgtt tctttcttcc caaactaaag caaatatggg atcttctgtt 540
232 agctatatta tggcggctaa ccatgcagcg tctgtggtgg gtgctggact cgctatcagt 600
233 gcggaagag cagattgcga agcccgtgc gctcgattg cgagagaaga gtcgttactc 660
234 gaagtgcgg gagaggaaaa tgcttgcgag aagaaagtcg ctggagagaa agccaagacg 720
235 ttcacgcgca tcaagtatgc actcctcact atgctcgaga agtttttga atgcgttgcc 780

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```

236 gacgttttca aattggtgcc gctgcctatt acaatgggta ttcgtgcgat tgtgggtgct      840
237 ggatgtacgt tcacttctgc aattattgga ttgtgcactt tctgcgccag agcataa      897
239 <210> SEQ ID NO: 17
240 <211> LENGTH: 298
241 <212> TYPE: PRT
242 <213> ORGANISM: Chlamydia trachomatis
244 <400> SEQUENCE: 17
245 Met Ala Ser Ile Cys Gly Arg Leu Gly Ser Gly Thr Gly Asn Ala Leu
246 1 5 10 15
247 Lys Ala Phe Phe Thr Gln Pro Asn Asn Lys Met Ala Arg Val Val Asn
248 20 25 30
249 Lys Thr Lys Gly Met Asp Lys Thr Ile Lys Val Ala Lys Ser Ala Ala
250 35 40 45
251 Glu Leu Thr Ala Asn Ile Leu Glu Gln Ala Gly Gly Ala Gly Ser Ser
252 50 55 60
253 Ala His Ile Thr Ala Ser Gln Val Ser Lys Gly Leu Gly Asp Ala Arg
254 65 70 75 80
255 Thr Val Val Ala Leu Gly Asn Ala Phe Asn Gly Ala Leu Pro Gly Thr
256 85 90 95
257 Val Gln Ser Ala Gln Ser Phe Phe Ser His Met Lys Ala Ala Ser Gln
258 100 105 110
259 Lys Thr Gln Glu Gly Asp Glu Gly Leu Thr Ala Asp Leu Cys Val Ser
260 115 120 125
261 His Lys Arg Arg Ala Ala Ala Ala Val Cys Ser Ile Ile Gly Gly Ile
262 130 135 140
263 Thr Tyr Leu Ala Thr Phe Gly Ala Ile Arg Pro Ile Leu Phe Val Asn
264 145 150 155 160
265 Lys Met Leu Ala Lys Pro Phe Leu Ser Ser Gln Thr Lys Ala Asn Met
266 165 170 175
267 Gly Ser Ser Val Ser Tyr Ile Met Ala Ala Asn His Ala Ala Ser Val
268 180 185 190
269 Val Gly Ala Gly Leu Ala Ile Ser Ala Glu Arg Ala Asp Cys Glu Ala
270 195 200 205
271 Arg Cys Ala Arg Ile Ala Arg Glu Glu Ser Leu Leu Glu Val Pro Gly
272 210 215 220
273 Glu Glu Asn Ala Cys Glu Lys Lys Val Ala Gly Glu Lys Ala Lys Thr
274 225 230 235 240
275 Phe Thr Arg Ile Lys Tyr Ala Leu Leu Thr Met Leu Glu Lys Phe Leu
276 245 250 255
277 Glu Cys Val Ala Asp Val Phe Lys Leu Val Pro Leu Pro Ile Thr Met
278 260 265 270
279 Gly Ile Arg Ala Ile Val Ala Ala Gly Cys Thr Phe Thr Ser Ala Ile
280 275 280 285
281 Ile Gly Leu Cys Thr Phe Cys Ala Arg Ala
282 290 295
284 <210> SEQ ID NO: 18
285 <211> LENGTH: 18
286 <212> TYPE: PRT
287 <213> ORGANISM: Chlamydia trachomatis

```

Please Note:

Use f n and/ r Xaa have been detect d in the Sequence Listing. Please review the Sequence Listing to ensure that a c rresponding explanation is presented in the <220> to <223> fields f ach sequence which presents at least ne n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/841,132

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Input Set : A:\469c8.app.txt
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L:13 M:270 C: Current Application Number differs, Wrong Format

L:709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:758 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47
L:1185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:1265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:1266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:1295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:1296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:1297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:1358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76
L:2310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120
L:3766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:175
L:3970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:176
L:5193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:6854 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:263
L:6895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:264
L:6931 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265
L:6972 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266
L:7058 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:271
L:7316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287
L:17644 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:492
L:18675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:512
L:18677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:512
L:19520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:524
L:19522 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:524